

What is claimed is:

- 5 1. A CMOS active pixel sensor (APS) transducer array for sensing an image by providing output signals from selected APS's comprising:
 - a number of APS's arranged in columns and rows;
 - power terminal means adapted to be connected to a power supply;
 - 10 - ground terminal means adapted to be connected to ground;
 - means for connecting the selected APS's to the power terminal means and the ground terminal means.
- 15 2. A transducer array as claimed in claim 1 wherein the connecting means comprises:
 - switch means for connecting the selected APS's to the power terminal means; and
 - 20 - coupling means for connecting the APS's to the ground terminal means.
3. A transducer array as claimed in claim 2 wherein the selected APS's are located in an array column.
- 25 4. A transducer array as claimed in claim 2 wherein the selected APS's are located in an array row.
5. A transducer array as claimed in claim 2 wherein the selected APS's are located in columns and rows of the array.
- 30 6. A transducer array as claimed in claim 2 wherein the selected APS's comprise all of the APS's located in selected array columns.
- 35 7. A transducer array as claimed in claim 2 wherein the selected APS's comprise all of the APS's located in selected array rows.

8. A transducer array as claimed in claim 1 wherein the connecting means comprises:

- 5 - switch means for connecting the selected APS's to the ground terminal means; and
- coupling means for connecting the APS's to the power terminal means.

9. A transducer array as claimed in claim 8 wherein the selected APS's are
10 located in an array column.

10. A transducer array as claimed in claim 8 wherein the selected APS's are located in an array row.

11. A transducer array as claimed in claim 8 wherein the selected APS's are
15 located in columns and rows of the array.

12. A transducer array as claimed in claim 8 wherein the selected APS's comprise all of the APS's located in selected array columns.

13. A transducer array as claimed in claim 8 wherein the selected APS's comprise all of the APS's located in selected array rows.
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14. A CMOS active pixel sensor (APS) transducer array for sensing an image by providing output signals from the APS's comprising:
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- a number of APS's arranged in N columns and M rows;
- a power terminal adapted to be connected to a power supply;
- a ground terminal adapted to be connected to a ground;
- 30 - means for coupling the APS's between the power terminal and the ground terminal comprising:
 - N transistor means wherein each of the N transistor means is connected between APS's in a respective column and the power terminal; and
 - 35 - further coupling means for coupling the APS's to the ground terminal.

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15. A transducer array as claimed in claim 14 wherein the further coupling means comprises M transistor means wherein each of the M transistor means is connected between APS's in a respective row and the ground terminal.
16. A transducer array as claimed in claim 15 comprising control means coupled to the transistor means for selectively activating and deactivating the transistor means.
- 10 17. A CMOS active pixel sensor (APS) transducer array for sensing an image by providing output signals from the APS's comprising:
- a number of APS's arranged in N columns and M rows;
 - a power terminal adapted to be connected to a power supply;
 - 15 - a ground terminal adapted to be connected to a ground;
 - means for coupling the APS's between the power terminal and the ground terminal comprising:
 - N transistor means wherein each of the N transistor means is connected between APS's in a respective column and the
 - 20 ground terminal; and
 - further coupling means for coupling the APS's to the power terminal.
18. A transducer array as claimed in claim 17 wherein the further coupling means comprises M transistor means wherein each of the M transistor means is connected between APS's in a respective row and the power terminal.
- 25 19. A transducer array as claimed in claim 18 comprising control means coupled to the transistor means for selectively activating and deactivating the transistor means.
- 30 20. A CMOS active pixel sensor (APS) transducer array for sensing an image by providing output signals from the APS's comprising:
- 35 a. a number of APS's arranged in N columns and M rows;
 - b. a power terminal adapted to be connected to a power supply;

- c. a ground terminal adapted to be connected to a ground;
- d. means for coupling the APS's between the power terminal and the ground terminal comprising:
 - M transistor means wherein each of the M transistor means is connected between APS's in a respective row and the power terminal; and
 - further coupling means for coupling the APS's to the ground terminal.

21. A transducer array as claimed in claim 20 comprising control means coupled to the transistor means for selectively activating and deactivating the transistor means.

22. A CMOS active pixel sensor (APS) transducer array for sensing an image by providing output signals from the APS's comprising:

- a. a number of APS's arranged in N columns and M rows;
- b. a power terminal adapted to be connected to a power supply;
- c. a ground terminal adapted to be connected to a ground;
- d. means for coupling the APS's between the power terminal and the ground terminal comprising:
 - M transistor means wherein each of the M transistor means is connected between APS's in a respective row and the ground terminal; and
 - further coupling means for coupling the APS's to the power terminal.

23. A transducer array as claimed in claim 20 comprising control means coupled to the transistor means for selectively activating and deactivating the transistor means.

24. In a CMOS active pixel sensor (APS) transducer array having a number of APS's arranged in columns and rows and connected to a power supply, for providing output signals representing an image and wherein the outputs of selected APS's are decimated to reduce the output bandwidth of the transducer, a method of controlling power consumption in the array

comprising the steps of:

- a. determining the selected APS's having outputs that are decimated; and
- b. disconnecting the selected APS's from the power supply.

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25. The method as claimed in claim 24 wherein the selected APS's are located in predetermined columns.

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26. The method as claimed in claim 25 wherein the selected APS's are located in predetermined rows.

27. The method as claimed in claim 24 wherein the selected APS's are located in every second, second to fourth, or second to eighth columns.

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28. The method as claimed in claim 24 wherein the selected APS's include all of the APS's located in predetermined columns.

29. The method as claimed in claim 28 wherein the selected APS's include all of the APS's located in predetermined rows.

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30. The method as claimed in claim 24 wherein the selected APS's include all of the APS's located in predetermined rows.

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